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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,395	12/27/2005	Junji Kodemura	4670-0115PUS1	7922
2292 7590 09/08/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER CLARK, GREGORY D				
ART UNIT		PAPER NUMBER		
4152				
NOTIFICATION DATE		DELIVERY MODE		
09/08/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/562,395

**Applicant(s)**

KODEMURA ET AL.

**Examiner**

GREGORY CLARK

**Art Unit**

4152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date 3/14/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8 drawn to a laminated body

Group II, claim 9 drawn to a method for producing a laminated body.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature does not provide a contribution over the prior art because the common technical feature is disclosed in JP2001326434A and JP2002338664A. Kanda teaches a laminated body made from a bulk polymerization of a norbornene monomer (cyclic olefin) using a ruthenium catalyst (JP2001326434A, paragraph 6 of the description). Kishi teaches a norbornene polymer and discloses several inorganic fillers including metal oxides and metal hydroxides (JP2002338664A, paragraph 24 of the description).

During a telephone conversation with Sandra Hegner on August 21, 2008 a provisional election was made with traverse to prosecute the invention of Group I,

claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claim 9 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

***Claim Rejections - 35 USC § 103***

**Claim 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (JP2001326434A) and Kishi (JP2002338664A)**

**Regarding claim 1**, Kanda teaches a laminated body made from a bulk polymerization of a norbornene monomer (cyclic olefin) using a ruthenium catalyst (JP2001326434A, paragraph 6 of the description). Kanda does not teach the use of inorganic fillers. Kishi teaches a norbornene polymer and discloses several inorganic fillers including metal oxides and metal hydroxides (*JP2002338664A, paragraph 24 of the description*). *Kishi further discloses that the mass (bulk) polymerization of these agents is carried out with a norbornene system monomer for the purpose of improvement in mechanical properties, such as contraction of the norbornene system resin-molding object acquired, and an elastic modulus, coloring, flameproofing, rigid grant, low-thermal-expansion, increase in quantity, a weight saving, electric conduction grant, or the prevention from electrification (JP2002338664A, paragraph 22 of the description).*

It would have been obvious to someone of ordinary skill in the art at the time of the invention to incorporate such fillers to achieve the properties listed in paragraph 22 of Kishi listed above.

**Regarding claim 2**, Kanda further teaches the use of several ruthenium carbene complex compounds, such as benzylienerutheniumdichloride and a ruthenium carbene complex compound, such as bis(1,3-dicyclohexyl 4-imidazoline 2-ylidene) benzylienerutheniumdichloride (JP2001326434A, paragraph 22 of the description).

**Regarding claim 3**, *Kishi further teaches the use of several inorganic fillers which fall into the class of metal oxides and metal hydroxides some of which include:* titanium oxide, antimony oxide, zinc oxide, magnesium oxide, aluminum oxide, magnesium hydroxide, aluminium hydroxide, calcium hydroxide, magnesium hydroxide and aluminium hydroxide (JP2002338664A, paragraph 24 of the description).

**Regarding claim 4**, *Kanda further teaches the use cyclic olefin monomers which contain only one double bond such as* norbornene, methyl norbornene, Dimethyl norbornene, ethyl norbornene, chlorination norbornene, chloromethyl norbornene, and trimethylsilyl norbornene, (JP2001326434A, paragraph 7 of the description).

**Regarding claim 5**, *Kanda fails to teach the use of chain transfer agents (retardants).* The applicant gives example in the specification for the types of chain transfer agents (retardant) useful in the invention *which include* vinyl norbornenes. *Kishi teaches the use of chain transfer agents (retardants),* such as vinyl norbornene, propenyl norbornene, and isopropenyl norbornene to control the polymerization initiation

rate (and thus control molecular weight) (*JP2002338664A, paragraph 55 of the description*). It would therefore be obvious to modify Kanda with Kishi to achieved the desired polymerization initiation rate (which controls molecular weight). It would therefore be expected that someone of ordinary skill in the art at the time of the invention would have carried out the polymerization if so desired in the presence of a chain transfer agent (retardant) resulting in the same characteristics with respect to polymerization initiation (which controls molecular weight), absence a showing of unexpected results (Kishi, paragraph 55).

***Regarding claims 6 and 7, Kishi discloses*** a method of carrying out mass polymerization of the norbornene system monomer in a metallic mold by the resin transfer molding (RTM) method or a reaction-injection-molding (RIM) method. A metallic mold is used in order to obtain a molded product of specified shape norbornene (*JP2002338664A, paragraph 63 of the description*). Although Kishi does not mention the specific temperature of the reaction within the metallic mold, the same class of cyclic olefin is used as the applicant.

Therefore, regarding the temperature claimed, such would be readily determined by routine experimentation in an effort to produce the optimum results. In re Boesch and Slaney, 205 USPQ 215 (CCPA 1980).

***Regarding claim 8, Kanda further teaches a laminated body where in the plating layer is formed by electroless plating and in some cases electrolytic plating*** (*JP2001326434A, paragraph 33 of the description*).



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY CLARK whose telephone number is (571)270-7087. The examiner can normally be reached on M-Th 7:00 AM to 5 PM Alternating Fri 7:30 AM to 4 PM and Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GDC

***/Joseph S. Del Sole/***

**Supervisory Patent Examiner, Art Unit 4152**